

the bulb less than an inch and a half below the surface. It was apparently trying to get deeper, as a strong runner had started from the bottom of the bulb.—FREDERICK H. BLODGETT, *Rutgers College, New Brunswick, N. J.*

John H. Redfield.—The death of Mr. John H. Redfield, conservator of the herbarium of the Academy of Natural Sciences of Philadelphia, which occurred in that city on the twenty-seventh of February, is regarded as a serious loss to the science he loved. He was for many years a member of the car-wheel manufacturing firm of that city, Asa Whitney & Sons, the founder of the firm being his father-in-law. His spare time from his business was devoted to self-culture, especially to learning languages, and studying natural history. He became a thorough Greek and Latin scholar, and continued the acquisition of modern languages through life, having mastered Spanish but a few years before his death. In natural history he was proficient in chemistry, mineralogy, conchology, and botany—the later years of his life being wholly devoted to the latter pursuit. In the knowledge of ferns he had few superiors anywhere, and workers in this group of plants were always happy in examining his rare collection, and profiting by his wide knowledge. The greatest monument to his labors will be the herbarium of the Academy of Natural Sciences of Philadelphia.

He retired from active business in 1885, and from that time devoted his whole time to building up this herbarium. Though with good material collected by many eminent men, it was in a sad state in the early sixties. On the death of Elias Durand, only one worker was left to give a few hours a day to its care. Its condition may be imagined by the reply of Dr. Gray to an application for a share in some specimens, "what is the use of throwing valuable material into a dust bin?" The letter, shown to Mr. Redfield, stirred a strong desire to give encouragement. During his noon recess from business he would call to enquire how the work was coming on. From this beginning he left the herbarium at his death with over 35,000 species of flowering plants and ferns, accurately determined, with many suites of specimens to show geographical range and variations, with a very large number undescribed. He had undertaken the immense labor of verifying and fastening to sheets the huge collection, and had more than half completed the task, leaving an unfinished genus on the table to take to his death bed. By his will he leaves all his books and collections of natural history to be sold, the proceeds to be devoted to continuing the work on the herbarium. This will start a "Redfield Memorial Herbarium Fund," by which the memory of his unselfish labors will be perpetuated.



He was born July 10, 1815, at Middletown, in modern times Cromwell, Connecticut. When a young man became acquainted with Prof. Torrey in New York and Dr. Gray, through membership in the New York Lyceum of Natural History. In 1846 he was elected to membership in the Philadelphia Academy. Always declining election to any high honors in the institution, he was glad to fill positions of usefulness. He served long as one of the Council of Management, and at his death had filled for many years the responsible position of chairman of its publication committee. Eminent botanists from many parts of the world made their calls on him when passing through Philadelphia.

"The Flora of Mount Desert Island, Maine," was his latest work, prepared in conjunction with his friend Edward L. Rand, and issued last year. The modesty of his nature may be inferred from the subtitle, "A Preliminary Catalogue," as no more complete local flora has probably been issued. He derived much satisfaction in his last days from the numerous letters commending the stand taken in that work against violent changes in plant nomenclature, his main point being the impossibility of practically carrying out without endless confusion that which might be correct as an abstract proposition. The Academy will soon publish a memoir giving an abstract of his life and services to science. In the language of one of his colleagues, "an association of the past eight years made me familiar with his beautiful character. He was always high principled, single-hearted, charitable, kind and helpful,—an affectionate friend, a wise counsellor, an upright judge." —THOMAS MEEHAN, *Germantown, Philadelphia*.

George Hunt.—In the death of Mr. George Hunt botanical science in Rhode Island has met with an irreparable loss. For over sixty years he has been familiar with every bog and wood in the state. When over eighty he could outwalk all his younger companions. He never seemed to know fatigue. Even for the nooning he never sat down, but ate, and that sparingly, while searching the rocks or glens.

He was a true wood-lover. The plants seemed to guess his feeling and to do their very best for his delight. For many years he was the chosen guide of some of us younger men, who all loved him with tender regard. His character was as sweet and pure as the aroma of the mayflower. It was a precious privilege to accompany him on a walk. Each year we went with him to welcome the hepatica. Sweet, unobtrusive, gentle, he could be roused to earnest remonstrance, or to contest a wrong. He was eminently a right minded man and a true gentleman.